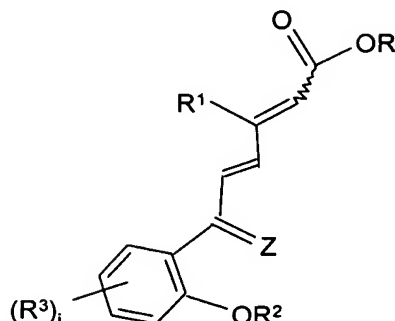


CLAIMS

1- Compound of the formula I :



in which

5 R^1 represents an optionally substituted saturated aliphatic hydrocarbon-based group; an optionally substituted saturated and/or aromatic carbocyclic group; an optionally substituted saturated and/or aromatic heterocyclic group;

R^2 represents an optionally halogenated saturated aliphatic hydrocarbon-based group; an optionally substituted saturated and/or aromatic carbocyclic group; a saturated aliphatic hydrocarbon-based group which is substituted by an optionally substituted aromatic carbocyclic group; or a saturated aliphatic hydrocarbon-based group which is substituted by a saturated and/or aromatic heterocyclic group;

the radicals R^3 represent, independently of each other, a saturated aliphatic hydrocarbon-based group, which is optionally halogenated and/or optionally interrupted by one or more O or S atoms; a halogen atom; a nitro group; cyano; a (C₆-C₁₀)aryloxy group, which is optionally substituted by one or more radicals G°; a (C₆-C₁₀)arylthio group, which is optionally substituted by one or more radicals G°; (C₁-C₁₀)alkylsulfonyl; (C₆-C₁₀)arylsulfonyl, in which aryl is optionally substituted by one or more radicals G°; 5- to 7-membered heteroaryl which comprises one or more hetero atoms chosen from O, N and S and is optionally substituted by one or more radicals G°; (C₆-C₁₀)aryloxycarbonyl; (C₆-C₁₀)arylcarbonylamino; (C₁-C₁₀)alkoxycarbonyl; (C₁-C₁₀)alkylcarbonylamino; di(C₁-C₁₀)alkylamino; (C₆-C₁₀)aryl(C₁-C₁₀)alkyl, in which aryl is optionally substituted by one or more radicals G°; (C₆-C₁₀)aryl, which is optionally substituted by one or

more radicals G° ; (C_1-C_{10}) alkylcarbonyl; or (C_3-C_8) cycloalkyl (C_1-C_{10}) alkyl, in which cycloalkyl is optionally substituted by one or more radicals G° ;

G° is chosen from halogen; optionally halogenated alkoxy; or optionally halogenated alkyl;

- 5 R represents a hydrogen atom; a saturated aliphatic hydrocarbon-based group; an amino group, which is optionally substituted by one or two saturated aliphatic hydrocarbon-based groups; or an optionally substituted aromatic carbocyclic group;

 Z represents O; CHR^4 in which R^4 takes any of the meanings given above
10 for R;

 i represents the integer 0, 1, 2, 3 or 4,

 and also the pharmaceutically acceptable salts thereof.

- 2- Compound according to Claim 1 of the formula I in which R represents H
15 or (C_1-C_{10}) alkyl; R^1 represents optionally halogenated (C_1-C_{10}) alkyl or optionally substituted (C_6-C_{10}) aryl; R^2 represents optionally halogenated (C_1-C_{10}) alkyl; R^3 represents optionally halogenated (C_1-C_{10}) alkyl; optionally halogenated (C_1-C_{10}) -alkoxy; or a halogen atom;

 Z represents O or CHR^4 in which R^4 is H or (C_1-C_{10}) alkyl.

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- 3- Compound according to either of Claims 1 and 2 of the formula I in which R^1 represents $-CH_3$ or $-phenyl$.

- 4- Compound according to any one of Claims 1 to 3 of the formula I in which
25 Z represents O.

- 5- Compound according to any one of Claims 1 to 4 of the formula I in which
i = 1 and R^3 located in position 5 of the phenyl nucleus represents (C_1-C_6) alkyl;
 (C_1-C_6) alkoxy; or a halogen atom.

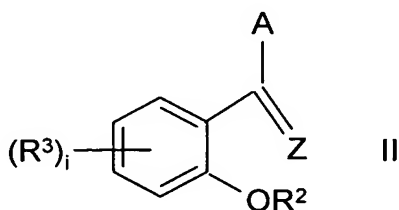
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6- Compound according to any one of Claims 1 to 5 of the formula I in which R^2 represents (C_1-C_6) alkyl.

7- Compound according to Claim 1 of the formula I chosen from the following compounds:

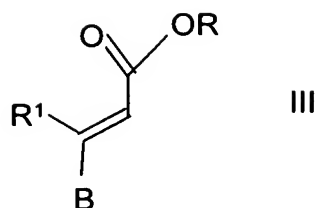
- (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- ethyl (E,E)-6-(2-methoxy-5-ethylphenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- (E,E)-6-(2-methoxy-5-ethylphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- ethyl (E,E)-6-(2-methoxy-5-chlorophenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- 10 - (E,E)-6-(2-methoxy-5-chlorophenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-phenylhexa-2,4-dienoic acid;
- ethyl (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- ethyl (E,E)-6-(2-benzyloxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- ethyl (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-propylhexa-2,4-dienoate;
- 15 - (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-propylhexa-2,4-dienoic acid;
- (E,E)-6-(2-hydroxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- ethyl 6-(2-isobutoxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoate; and
- 6-(2-isobutoxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid.

20 8- Process for the preparation of a compound of the formula I according to any one of Claims 1 to 7, which comprises the reaction of a compound of the formula II:

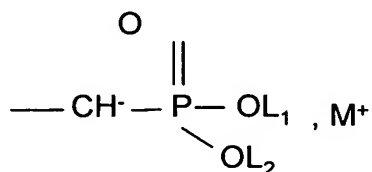


25 in which i , R^3 , R^2 and Z are as defined above for formula I in Claim 1, with a compound of the formula III:

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in which R¹ and R are as defined, except that R does not represent a hydrogen atom for formula I in Claim 1, and either A or B represents -CHO, the other representing:



5

in which L₁ and L₂ are (C₁-C₆)alkyl and M⁺ represents a monovalent cation.

9- Pharmaceutical composition comprising one or more compounds of the formula I according to any one of Claims 1 to 7, in combination with one or more pharmaceutically acceptable excipients.

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10- Use of a compound according to any one of Claims 1 to 7, for the preparation of a pharmaceutical composition that can be used for the treatment and prevention of dyslipidaemia, atherosclerosis and diabetes.